12th EMEAP HLM Meeting March 2017 Bali, Indonesia,

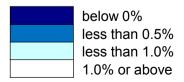


The challenges of microprudential supervision in an exceptionally low interest rate environment

22 March 2017 Shunsuke Shirakawa Financial Services Agency, Japan

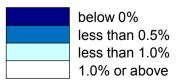
Growing prevalence of very low rates (1/2, as of end-Dec 2011)

	1Y	2Y	3Y	4Y	5Y	6Y	7Y	8Y	9Y	10Y	11Y	12Y	13Y	14Y	15Y	20Y	30Y
Switzerland	0.33	-0.07	-0.07	-0.02	0.13	0.36	0.51	0.53	0.55	0.64	0.71	0.77	0.84	0.90	0.97	1.01	1.00
Japan	0.11	0.13	0.17	0.25	0.34	0.41	0.55	0.65	0.83	0.98	1.07	1.15	1.23	1.32	1.40	1.75	1.91
Germany	-0.08	0.14	0.27	0.50	0.75	1.07	1.33	1.52	1.67	1.83	1.92	2.02	2.12	2.22	2.32	2.48	2.36
Denmark	-0.01	0.04	0.08	0.28	0.56	0.85	1.07	1.28	1.46	1.63	1.67	1.70	1.74	1.77	1.81	1.95	2.08
Netherlands	-0.13	0.13	0.53	0.90	1.16	1.54	1.76	1.92	2.06	2.18	2.21	2.24	2.28	2.31	2.34	2.55	2.47
Finland	-0.09	0.27	0.59	0.94	1.07	1.72	1.92	2.12	2.21	2.30	2.37	2.44	2.51	2.59	2.66		
Austria	0.37	0.90	1.06	1.43	2.14	2.42	2.72	2.78	2.85	2.87	2.96	3.04	3.12	3.21	3.29	3.34	3.39
France	0.15	0.74	1.13	1.49	1.85	2.29	2.61	2.81	3.04	3.14	3.21	3.28	3.35	3.42	3.50	3.61	3.65
Belgium	0.58	2.11	2.57	2.78	3.06	3.42	3.52	3.66	3.85	4.06	4.08	4.10	4.12	4.14	4.16	4.22	4.28
Sweden	1.14	0.83	0.87	0.90	1.02	1.12	1.22	1.35	1.48	1.61	1.63	1.65	1.67	1.69	1.72	1.83	2.04
Ireland	1.14	7.21	7.54	7.45	7.36	7.75		8.27	8.26	8.22	8.18	8.14	8.10	8.06	8.01	1.03	2.04
	4.40										0.10	0.14	6.10	8.06	6.01		
Norway	1.19	1.22	1.39	1.55	1.73	1.91	2.07	2.24	2.30	2.37							
Canada	0.93	0.95	0.99	1.18	1.27	1.38	1.50	1.67	1.84	1.94	2.00	2.07	2.14	2.20	2.27	2.49	2.49
UK	0.32	0.32	0.48	0.76	1.05	1.25	1.49	1.69	1.80	1.98	2.14	2.31	2.39	2.47	2.55	2.83	3.05
Italy	3.74	5.05	5.69	5.70	6.15	6.29	6.51	6.46	6.43	7.03	7.01	6.99	6.98	6.96	6.94	7.20	6.78
Spain	2.82	3.16	3.26	3.66	4.05	4.39	4.56	4.59	4.83	5.04	5.17	5.29	5.42	5.55	5.67	5.84	5.83
US	0.10	0.24	0.36	0.59	0.83	1.09	1.35	1.52	1.70	1.88	1.93	1.98	2.03	2.08	2.13	2.34	2.90
Israel	3.14	2.71	2.98	3.26	3.45	3.74	4.04	4.21	4.37	4.54	4.62	4.71	4.79	4.88	4.96		
Portugal	7.92	14.50	16.18	13.80	14.96	15.63	15.44	15.21	14.75	12.79	12.91	13.04	13.17	13.30	13.43	11.47	9.50
Greece					49.78	43.73	38.87	40.31	38.01	31.68	30.61	29.54	28.46	27.39	26.32	23.75	21.18

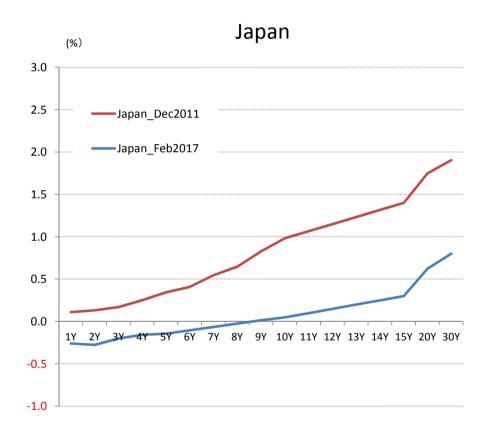


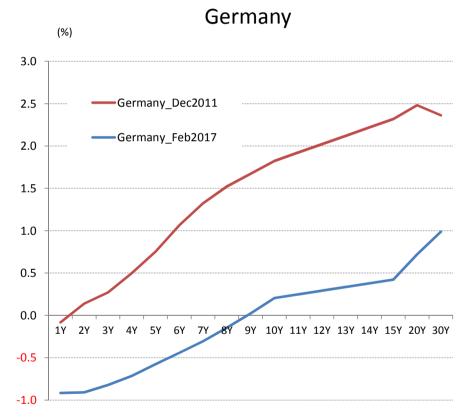
Growing prevalence of very low rates (2/2, as of end-Feb 2017)

	1Y	2Y	3Y	4Y	5Y	6Y	7Y	8Y	9Y	10Y	11Y	12Y	13Y	14Y	15Y	20Y	30Y
Switzerland	-1.04	-1.02	-0.93	-0.86	-0.74	-0.64	-0.52	-0.40	-0.35	-0.26	-0.20	-0.14	-0.11	-0.08	-0.04	0.11	0.22
Japan	-0.26	-0.28	-0.20	-0.16	-0.14	-0.11	-0.07	-0.02	0.01	0.05	0.10	0.15	0.20	0.25	0.30	0.62	0.80
Germany	-0.92	-0.91	-0.82	-0.71	-0.57	-0.44	-0.31	-0.14	0.02	0.21	0.25	0.29	0.34	0.38	0.42	0.72	0.99
Denmark	-0.71	-0.70	-0.60	-0.50	-0.41	-0.27	-0.13	0.02	0.17	0.49	0.53	0.58	0.63	0.68	0.72	0.96	
Netherlands	-0.84	-0.83	-0.77	-0.69	-0.41	-0.23	-0.03	0.17	0.32	0.48	0.53	0.57	0.62	0.67	0.72	0.84	1.09
Finland	-0.75	-0.76	-0.70	-0.55	-0.28	-0.25	-0.07	0.01	0.25	0.35	0.43	0.52	0.61	0.69	0.78	0.93	1.22
Austria	-0.74	-0.76	-0.72	-0.60	-0.44	-0.23	-0.11	0.08	0.25	0.43	0.54	0.65	0.76	0.87	0.98	1.11	1.42
France	-0.55	-0.54	-0.38	-0.19	0.01	0.09	0.26	0.49	0.71	0.89	0.96	1.04	1.11	1.19	1.26	1.55	1.86
Belgium	-0.62	-0.58	-0.51	-0.42	-0.22	-0.10	0.15	0.38	0.53	0.70	0.77	0.84	0.91	0.98	1.04	1.11	1.69
Sweden	-0.69	-0.67	-0.53	-0.40	-0.15	-0.04	0.08	0.29	0.41	0.52	0.65	0.78	0.90	1.03	1.16	1.51	
Ireland	-0.53	-0.48	-0.43	-0.39	-0.07	0.16	0.41	0.64	0.76	0.87	0.97	1.06	1.15	1.24	1.33	1.73	1.97
Norway	0.50	0.61	0.77	0.94	1.08	1.23	1.35	1.50	1.60	1.70							
Canada	0.59	0.76	0.86	1.01	1.11	1.16	1.31	1.41	1.52	1.63	1.70	1.77	1.83	1.90	1.97	2.30	2.34
UK	0.08	0.09	0.23	0.30	0.55	0.64	0.79	0.93	1.07	1.15	1.26	1.38	1.42	1.46	1.50	1.67	1.74
Italy	-0.27	-0.04	0.33	0.46	0.82	1.14	1.46	1.76	1.85	2.08	2.15	2.21	2.28	2.35	2.42	2.70	3.18
Spain	-0.29	-0.14	0.04	0.17	0.49	0.68	1.07	1.31	1.49	1.64	1.71	1.78	1.85	1.93	2.00	2.45	2.83
US	0.82	1.26	1.52	1.73	1.93	2.08	2.22	2.28	2.33	2.39	2.42	2.45	2.48	2.51	2.54	2.69	3.00
Israel	0.12	0.38	0.60	0.79	0.98	1.45	1.68	2.08	2.13	2.19	2.25	2.13	2.19	2.25	2.30	2.64	3.33
Portugal	-0.09	-0.03	0.50	1.22	1.79	2.54	3.17	3.43	3.67	3.85	3.98	4.11	4.24	4.37	4.50	4.62	4.81
Greece	5.90	7.91	7.80	7.70	7.59	7.48	7.38	7.27	7.16	7.06	7.16	7.26	7.36	7.47	7.57	7.59	



Flattening of yield

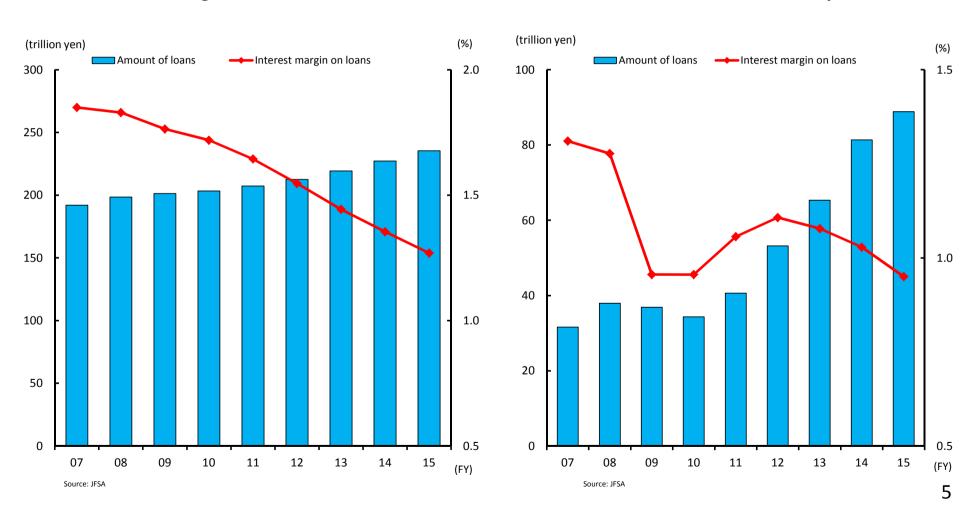




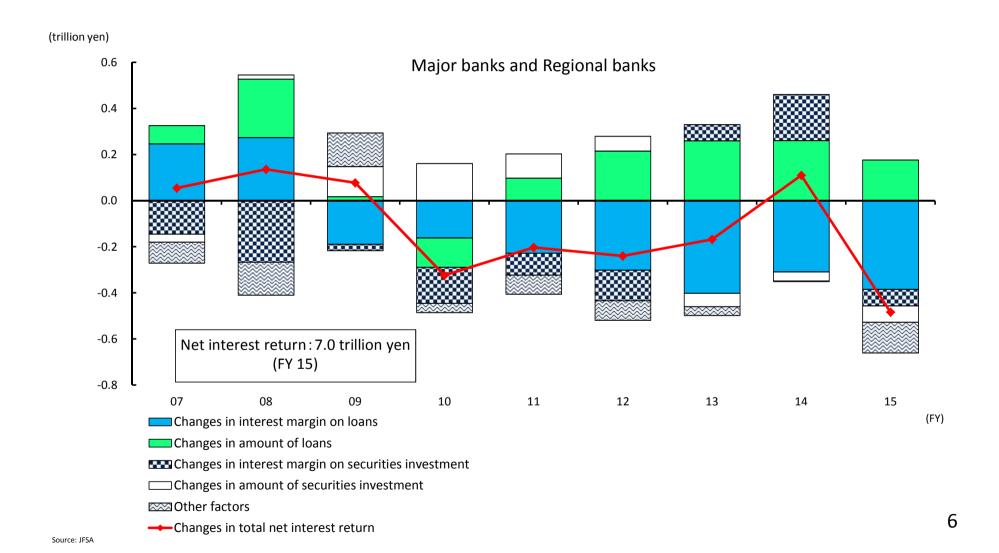
Lending margin and loans outstanding

Regional banks

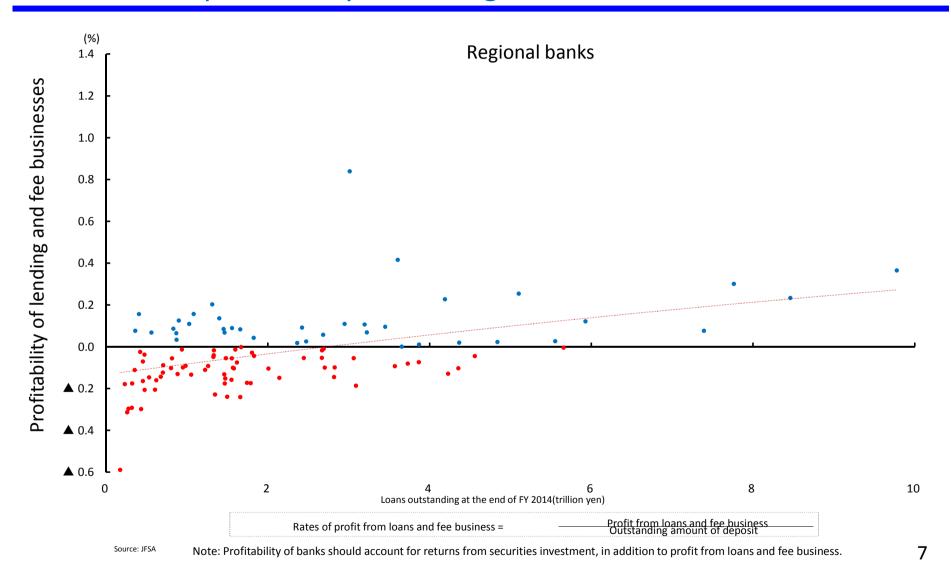
Overseas businesses of major banks



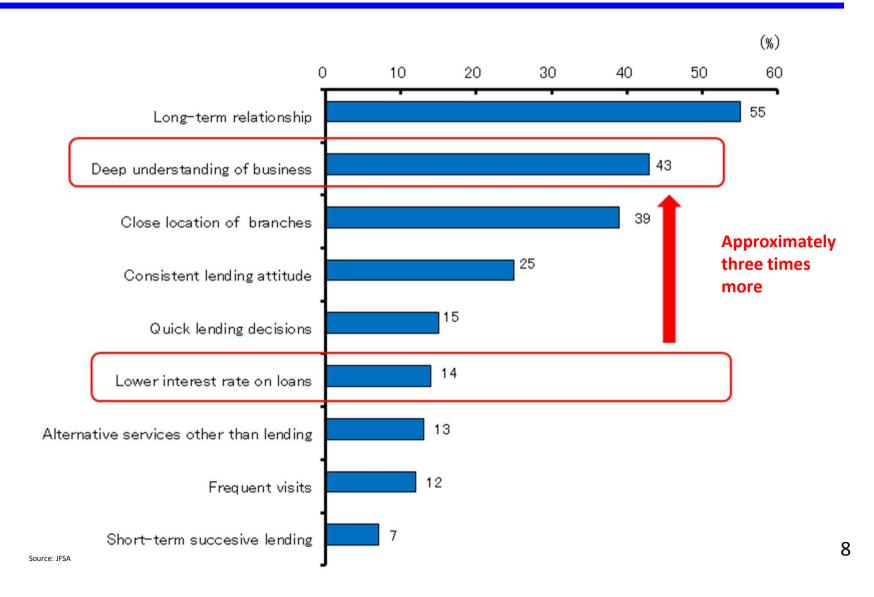
Contributing factors of changes in net interest income (exc. Stocks)



Estimated profitability of lending and fee businesses in 2025



What corporate customers expect from their main-banks



Evolutions in supervisory tasks and approaches

Around year 2000

Present

Environment Economic depression and financial crisis

Decreasing/aging population, and global low interest rate environment

Accelerated changes in types and locations of risks

Main tasks Terminate NPL problem (and thereby restore confidence in bank supervision)

Assess the sustainability of banks' business model and encourage them to take necessary responses

Improve capabilities at banks and supervisors to identify and respond to new risks

Approaches

- Ensure compliance with Pillar 1 MR
- Static focus on B/S soundness
- Conservative risk taking/mgmt. recommended

- Sustainability of banks' business models
- Comprehensive assessment of risks including those outside Pillar 1
- Balancing banks' return, risks and capital

- Forward-looking identification of material risks
- Maintain sufficient functions to respond to such risks at an early stage (before materialization)

Elements to ensure sustainable banking business

Risk-return balance

If **profits** are low relative to the **risks**, it may **become difficult to ensure sustained profits**.

Return

Return-capital balance

If profits are low relative to the capital, it may become difficult for the bank to procure capital from internal reserves and capital market, threatening to secure a sufficient amount of capital in the future.



Capital

Risk-capital balance

If the **capital** is low relative to the **risks**, in line with the change in the market and economy, **the balance sheet of the bank may be damaged**, **and the bank may lose confidence from the depositors**.

Supervisory responses and communication with the banks

